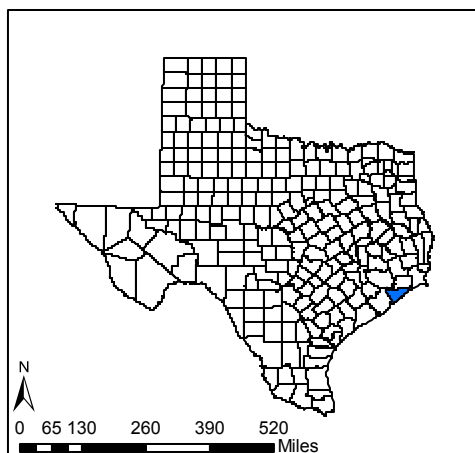
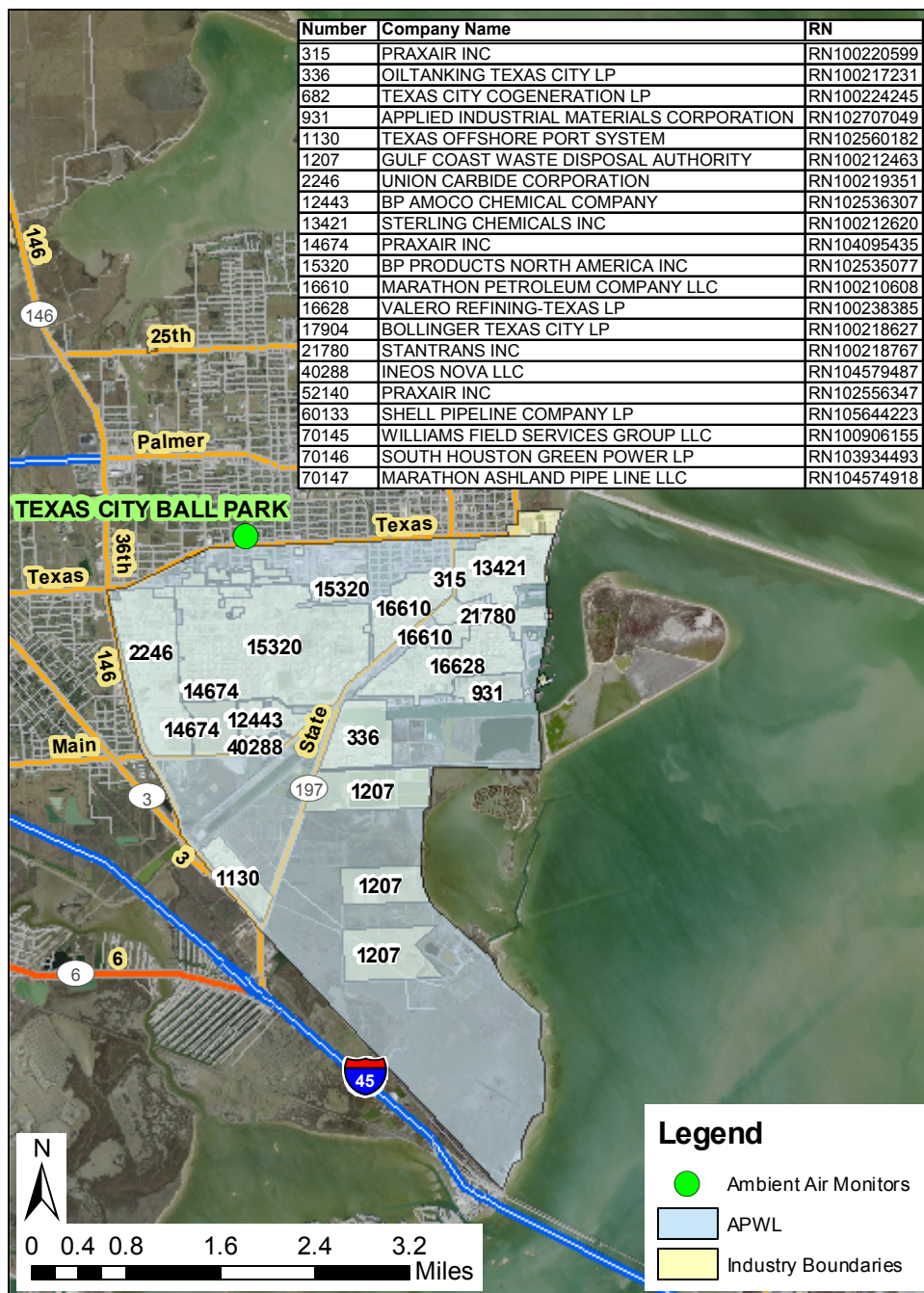


Air Pollutant Watch List Area

APWL1202 - Propionaldehyde, Benzene, & Hydrogen Sulfide
Texas City, Galveston County, Texas

Texas Commission
on Environmental Quality



Map created on June 26, 2009

This map was generated by the Toxicology Division (TD) of the Texas Commission on Environmental Quality. No claims are made to the accuracy or completeness of the data, or to the suitability of the map for a particular use. This APWL area of concern may contain facilities which have not been identified by the TD. For more information regarding this map, please contact the TD at (512)239-1795.

Where is the Area of Concern Located?

- * South of TX Avenue/State Hwy 348
- * East of Hwy 146
- * West of Galveston Bay (West Bay)

Why is this Location and Pollutant(s) on the APWL?

Propionaldehyde

During the 2000 and 2001 mobile monitoring projects, concentrations of propionaldehyde were detected above the odor-based air monitoring comparison value (AMCV) downwind of Dow Chemical (formerly Union Carbide). Although no odorous levels were detected in the 2004 mobile monitoring project, odorous levels were detected during the 2008 mobile monitoring project.

Benzene

Elevated benzene levels have been detected during mobile monitoring projects from 2001 to 2008, downwind of various facilities throughout the Texas City area. Some of the concentrations detected during these projects have exceeded the short-term AMCV and several detections could contribute to elevated long-term concentrations. In addition, long-term stationary monitoring in the Texas City area has historically detected annual ambient concentrations of benzene above the long-term AMCV. The 11th Street monitor, funded by Marathon, has consistently had annual average benzene concentrations above the long-term AMCV since monitoring began in 2004. Data from the 34th Street monitor, funded by BP North America Products, Inc., indicated a 70% decrease in annual average benzene concentrations from 2005 to 2008; although emission events in 2009 lead to an elevated annual average.

Hydrogen Sulfide

A 2004 mobile monitoring trip reported hydrogen sulfide (H₂S) levels that exceeded the H₂S 30-minute state regulatory standard. These reported levels had the potential to cause short-term odor-related health effects downwind of Gulf Coast Waste Disposal Authority (GCWDA) and Valero. A subsequent mobile monitoring project in 2008 did not detect any concentrations of H₂S above the regulatory standard. Limited stationary monitoring data indicated a decreasing trend in H₂S from 2004 until 2008. In 2009, however, there were 16 exceedances at the Texas City Ball Park monitor.

Annual evaluations may be accessed here:

<http://www.tceq.state.tx.us/implementation/tox/regmemo/AirMain.html>